EuroPCR 2009, the official annual meeting of the EAPCI, took place in Barcelona, Spain from 18–22 May, and provided over 10,000 attendees with an exciting programme covering the entire field of CV interventions. Through a variety of sessions (e.g. plenaries, late-breaking clinical trials, symposia and workshops), participants were able to gain insight to the latest CV news, discuss hot topics with opinion leaders and really understand how to implement these latest clinical advances into their own daily practice. In addition, there were a number of ‘live in-a-box’ sessions, which combined live cases with the most up-to-date data. This report highlights some of the key sessions from the meeting.

‘Do it for the patient’

The clear message at EuroPCR 2009 was ‘Do it for the patient’, focussing on an interdisciplinary approach to the patient with the common objective of ‘what is the best treatment for an individual patient?’.

The implementation of a ‘heart team’ (cardiologists, surgeons, anaesthetists, nurses and technicians) working closely together in the process of clinical decision making was strongly advocated, despite the understanding that putting this principle into practice is challenging.

‘Stent for Life’

Another novel important initiative presented was ‘Stent for Life’. W Wijns (Belgium) highlighted that even in the face of strong scientific evidence for urgent revascularisation as a life-saving procedure for patients with acute CAD, there is a substantial underuse of it, with up to 85% of patients not receiving any kind of reperfusion therapy in certain EU countries. In light of this, the aim of this new initiative is ‘to improve the delivery and patient access to the life-saving indications of PCI and thereby reduce mortality and morbidity of patients suffering from ACS’.

**TAVI**

It is agreed that transcatheter aortic valve implantation (TAVI) is an effective and acceptable alternative to conventional surgery for patients at high surgical risk. However, broadening the indication and accepting low-risk patients at that stage is still strongly discouraged. Furthermore, it was made clear that the patient’s wish to refuse surgery is not an acceptable indication for TAVI.

There is an understanding that the currently available risk scores have shortcomings since they have never been designed for this particular cohort of patients. Despite this, using risk scores to evaluate the individual risk (i.e. the Euroscore or STS score) is considered mandatory. M Thomas (UK) stressed that optimal patient selection for TAVI also requires exact assessment of the aortic anatomy, valvular morphology and the vascular access site by imaging techniques. Similarly, M Leon (USA) highlighted the importance that the decision for TAVI and procedure management should always be made by a multidisciplinary heart team, and TAVI should only be performed in patients with whom a consensus between cardiologist, cardiac surgeon and anaesthesiologist can be reached.

The latest results from TAVI registries were also reported. V Schächinger (Germany) presented 1-year follow-up data from the PARTNER EU registry. In this nonrandomised registry, 130 patients were included (61 patients after transfemoral and 69 patients after transapical AVI with the SAPIEN valve [Edwards Lifesciences]). In both groups, comparably good long-term functional outcomes could be obtained with an overall 1-year survival rate of 62%.
L Buellesfeld (Germany) presented data on the 12-month safety and performance of TAVI using the 18 F CoreValve revalving prosthesis (Medtronic, Inc). In this analysis 112 patients were included. The mean age of the patients was almost 82 years and the mean logistic Euroscore was 23%. Technical success rate was 86.5% with an excellent acute, maintained haemodynamic and functional performance. All-cause mortality after 30 days and after 12 months was 15.2% and 28.6%, respectively, and thus lower than estimated.

M Thomas also presented the 30-day results of the SOURCE Registry – a European registry of TAVI using the SAPIEN valve. TAVI was performed via transfemoral (TF) access in 463 patients and via transapical (TA) access in 575 patients. However, results showed the TA group suffered from more comorbidities and a higher Euroscore. Overall technical success rate was 94% and mortality rate at 30 days was 8.5% (6.3% for the TF group and 10.3% for the TA group).

Importantly, it was found in the registry that major vascular complications were not associated with an increased mortality.

The ‘Great Debate’ – treating the elderly

This session was chaired by J Fajadet (France). Even though no clear definition exists, an age of 75 years is a mostly accepted threshold among cardiologists and surgeons. Fundamental goals for the treatment of this particular patient cohort were depicted as prolonged survival, improved QOL and cost effectiveness of the treatment. It was emphasised that the best results, considering clinical outcome and cost effectiveness, can be obtained by a collaborative multidisciplinary team approach to the patient. However, post-procedural follow-up of the patients, which includes both rehabilitation and the family, is essential.

Glimpse into the future

As described by A Kappetein (The Netherlands), the SYNTAX score aims to characterise coronary anatomy and to predict outcome after PCI. While the score incorporates several previously described angiographic scores and has been validated in the SYNTAX trial (allowing good prediction of MACCE) it does not account for comorbidities. A Colombo (Italy) presented 12-month follow-up data from the SYNTAX trial which compared surgery with interventional treatment in patients with three-vessel disease and focused on different subgroup analyses. Results showed that PCI works well for patients with low SYNTAX scores but CABG was superior in patients with high scores. No gender- or age-dependent differences in the overall outcome could be observed. However, in the elderly, the lower stroke rate seems to favour PCI.

N Pijls (The Netherlands) discussed the results of the FAME study in the context of the SYNTAX data. In FAME, patients with multivessel disease underwent fractional flow reserve (FFR)-guided interventional treatment.

It was pointed out that in the FFR-guided group fewer stents per patient, procedural time was identical to non-FFR-guided group, costs for material were lower and the composite endpoint of death, MI, CABG or repeat PCI was significantly lower (13.2% vs. 18.4%; p=0.02). Therefore, these data represent the paradigm for functional revascularisation, stenting of ischemic lesions and medical treatment of nonischemic lesions.

Finally, P Serruys (The Netherlands) and F Mohr (Germany) considered the results of the SYNTAX trial and registry, and highlighted that 66% of the patients are best treated with CABG; however, for the remainder, PCI is an excellent alternative.